Amendments to the Specification

Please replace the title with the following amended title:

METHOD AND APPARATUS FOR ~~THE DETECTION OF MULTIPLE SMALL~~ ~~DEFECTS IN A FLAW SCAN DETECTION SYSTEM~~ IDENTIFYING DEFECTIVE AREAS ON A DISK SURFACE OF A DISK DRIVE BASED ON DEFECT DENSITY

Please replace the paragraph that begins on page 2, line 12 with the following amended paragraph:

In order to help prevent delivery of computer disk drives having defects in storage media to end users, disk drives are typically tested for such defects. According to a typical testing procedure, data is written to the storage media in a test pattern. The test pattern is then read from the storage media and the results of the read operation are compared to the expected results. For example, a signal produced in the channel of a hard disk drive as a result of reading the test pattern may be periodically sampled, and the amplitudes of the samples may be compared to the expected amplitudes. A signal indicating the detection of a defect may be generated if a sampled value is less than the corresponding expected value. For further information regarding a method and apparatus used to detect flaws in storage media, see U.S. Patent Application No. 09/848,089 filed May 2, 2001 ~~No.~~ _____ ~~filed~~ _____, entitled "METHOD AND APPARATUS FOR FLAW DETECTION IN SYNCHRONOUS SAMPLING (PRML) READ CHANNELS USING POST PROCESSED DIGITAL FILTERS" to Curtis Egan, and assigned to the assignee of the present invention, the entire disclosure of which is hereby incorporated by reference.

Please replace the paragraph that begins on page 7, line 17 with the following amended paragraph:

Fig. 6C depicts a defect flag signal produced by another embodiment of the present invention in response to the counter value of **Fig. 6B**;

Please replace the paragraph that begins on page 13, line 18 with the following amended paragraph:

Bytes 11-23 are not found to contain defects. Therefore, the count value i decays by ¼ for each of the bytes 11-23. A ~~defleet~~ <u>defect</u> flag indicating a high defect density continues to be generated until byte 18, where the count value i becomes equal to 2.

Please replace the paragraph that begins on page 17, line 17 with the following amended paragraph:

At byte 6, no defect is detected. Because at least 3 of last 4 bytes contained defects, at the rate of decay s_n is set equal to s_3, or 1 in the present example. Accordingly, the count value i is decremented by 1 so that it now equals 1.5. Because 1.5 is less than the threshold 2, the defect flag is discontinued. It will be noted that, with respect to the embodiment of the invention described with respect to **Fig. 3 and Fig. 4**, a defect flag was still generated with respect to bytes 6 and 7. However, because of the variable rate of decay provided by the embodiment illustrated in connection with ~~Fig. 5B~~ <u>Fig. 5</u>, and because the rates of decay that may be selected are all greater than the example of **Fig. 4**, no defect flag is generated in connection with bytes 6 and 7.

Please replace the paragraph that begins on page 18, line 3 with the following amended paragraph:

With respect to byte 7, again no defect is detected. Because two of the last 4 bytes contain defects, s_n is set equal to s_2, or 0.5 in the present example, and i is decremented to become equal to 1.0. At byte 8, no defect is detected. Because one of the last [[3]] $\underline{4}$ bytes contained a defect, s_n is set equal to s_1, or 0.33 in the present example, and i becomes equal to 0.67.

Please replace the paragraph that begins on page 21, line 9 with the following amended paragraph:

The down counter **808** receives the value s_n from the function block **832** of the decay circuit **812**, and decrements i by s_n ($i = i - s_n$). The new value for i is output to a comparator **836**, which receives at a second ~~output~~ $\underline{input}$ a threshold value held by register **840**. If the value i is greater than or equal to the threshold value, the comparator **836** generates a flag **844**. The output of the down counter **808** is also provided to a decision block **848**. The decision block **848** determines whether a byte under consideration contains a defect. If no defect is detected with respect to the byte, the count value i is decremented in the down counter **808** by the value s_n. If a defect is detected, the count value i is incremented by the value n at the summing block **804**, and the new value for i is provided to the down counter **808**.